

taminated brake fluid can cause brake failure.

2. Do not allow brake fluid to contact any plastic parts or painted surfaces as damage will result.
3. Always keep the master cylinder reservoir and spare cans of brake fluid closed to prevent dust or moisture from entering. Brake fluid contamination and will cause brake problems.
4. Use only new or DOT 4 brake fluid to wash parts. Never clean any internal brake components with solvent or any other petroleum based cleaners as these cleaners will cause the rubber components to swell, resulting in distorted and damaged parts.
5. When any component has been removed from the brake system, the system is considered opened and must be bled to remove air bubbles. Also, if the brake feels spongy, there are usually air bubbles in the system and it must be bled. For safe brake operation, refer to *Brake Bleeding* in this chapter for complete details.

WARNING

When working on the brake system, never blow off brake components or use compressed air. Do not inhale any airborne brake dust as it may contain asbestos, which can cause lung injury and cancer. As an added precaution, wear an OSHA approved filtering face mask and thoroughly wash your hands and forearms with warm water and soap after completing any brake work.

FRONT BRAKE DRUM

The front brake drum can be removed without having to remove the front hub.

Removal/Installation (Two-Wheel Drive)

Refer to **Figure 1**.

1. Remove the front wheels (Chapter Ten).

2. Remove the hub cap.
3. Remove the hub nut cotter pin.
4. Remove the hub nut, then remove the front brake drum.
5. Inspect the brake drum and service the waterproof seal as described in this section.
6. Inspect the O-ring on the end of the axle (**Figure 2**). Replace it if necessary. Apply grease to the O-ring before installing the brake drum.
7. Lubricate the waterproof seal (B, **Figure 3**, typical) with a multipurpose grease (NLGI No. 3) as shown in **Figure 4**. If a new waterproof seal was installed, refer to *Brake Drum Waterproof Seal Inspection and Replacement* for the correct amount of grease to apply to the seal.

WARNING

Do not get grease on the inner surface of the brake drum where the brake shoe linings make contact. The grease will contaminate the lining surfaces and reduce braking performance. If grease does get onto the brake drum, thoroughly clean off all grease residue with lacquer thinner.

8. Install the brake drum.
9. Install the hub nut and tighten it to 78 N•m (58 ft.-lb.).
10. Rotate the hub nut clockwise just until the cotter pin can be inserted through the holes in the hub nut and axle. Spread the cotter pin ends to lock it in place.

NOTE

After installing the cotter pin, make sure the pin ends will not contact the hub cap.

11. Install the hub cap.
12. Install the front wheels (Chapter Ten).

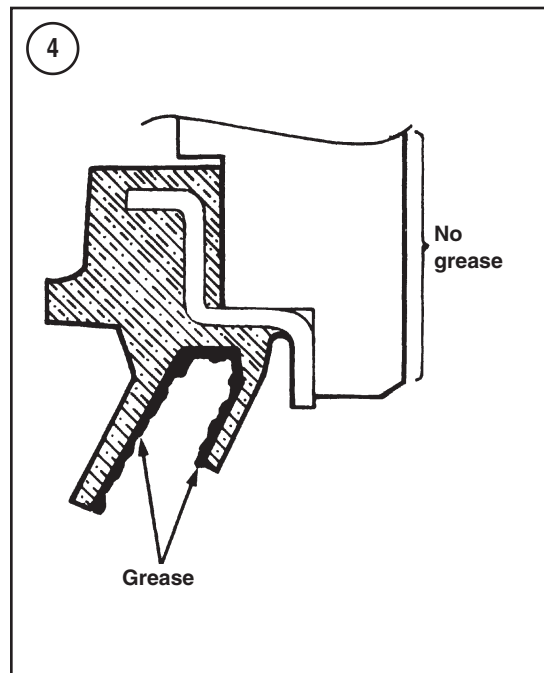
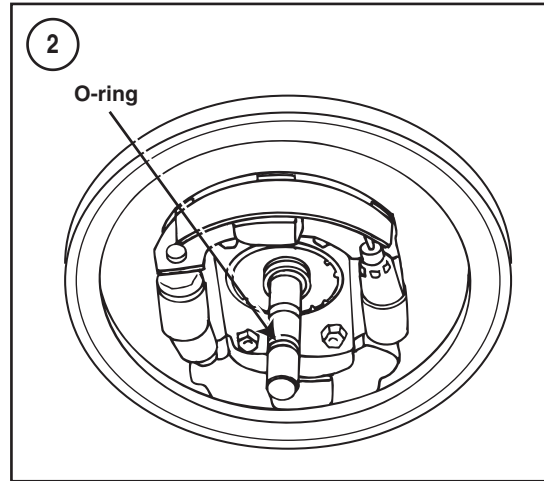
Removal/Installation (Four-Wheel Drive)

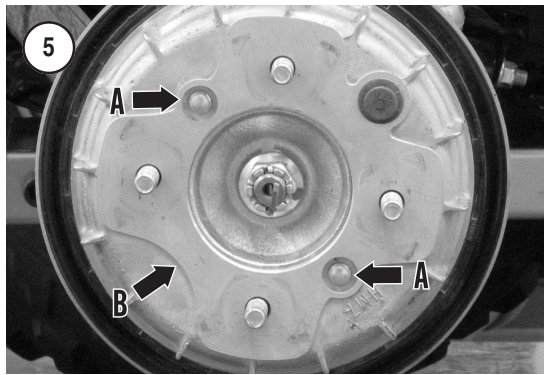
Refer to **Figure 1**.

NOTE

*To remove the brake drum and front hub at the same time, refer to **Front Hub** in Chapter Ten.*

1. Remove the front wheels (Chapter Ten).





2. Remove the bolts (A, **Figure 5**) and the front brake drum (B).
3. Remove the O-ring (A, **Figure 3**), if necessary.
4. Inspect the brake drum and service the waterproof seal as described in this section.
5. Install the O-ring (A, **Figure 3**), if it was removed.
6. Lubricate the waterproof seal (B, **Figure 3**) with a multipurpose grease (NLGI No. 3) as shown in **Figure 4**. If a new waterproof seal was installed, refer to *Brake Drum Waterproof Seal Inspection and Replacement* for the correct amount of grease to apply to the seal.

WARNING

Do not get grease on the inner surface of the brake drum where the brake shoe linings make contact, as this will contaminate the lining surfaces and reduce braking performance. If grease does get onto the brake drum, thoroughly clean off all grease residue with lacquer thinner.

7. Install the brake drum (B, **Figure 5**) onto the wheel hub and brake linings.

8. Install the brake drum mounting bolts (A, **Figure 5**) and tighten them to 12 N•m (106 in.-lb.).
9. Install the front wheels (Chapter Ten).

Brake Drum Inspection

1. Inspect the brake drum (**Figure 3**, typical) for cracks, excessive wear or other damage.
2. On four-wheel drives, replace the O-ring (A, **Figure 3**) if it is excessively worn or damaged.
3. Inspect and service the waterproof seal (B, **Figure 3**, typical) as described later in this section.
4. Check the brake drum contact surface for grease residue, scoring, cracks or other damage.

WARNING

If oil or grease is on the drum surface, clean it off with a clean rag soaked in lacquer thinner—do not use any solvent that may leave an oil residue. Keep the cleaning solution away from the waterproof seal.

5. Measure the brake drum inside diameter (**Figure 6**) and compare it to the service limit in **Table 1**. Measure it at several points around the brake drum. Replace the brake drum if it is out of specification.

Brake Drum Waterproof Seal Inspection and Replacement

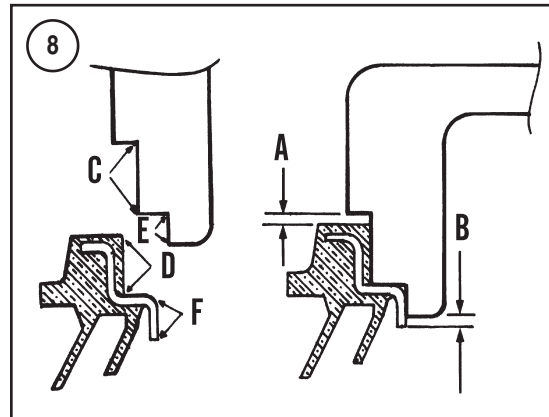
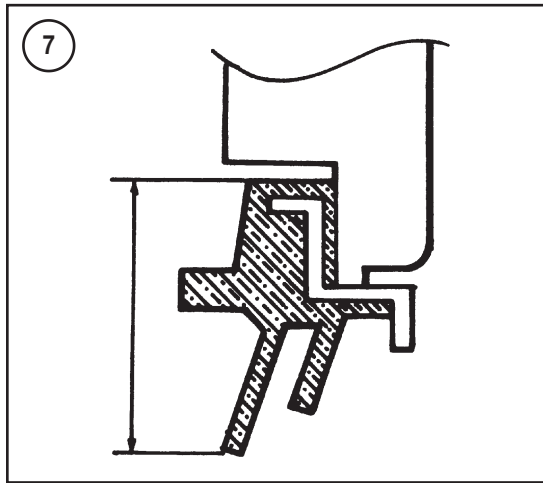
The brake drum waterproof seal keeps water out of the brake drum. Inspect this seal and replace it when necessary to prevent excessive brake drum and lining wear from water and other debris.

1. Remove the brake drum as described in this section.
2. Inspect the waterproof seal (B, **Figure 3**) for excessive wear, damage, hardness or deterioration.
3. Measure the waterproof seal lip length (**Figure 7**). Measure at several different points around the seal. See **Table 1** for service specifications. Replace the seal if it is out of specification.

NOTE

The following dimensions must be calculated because the inner portion of the waterproof seal cannot be seen when the seal is installed in the brake drum.

4. Perform the following:



- a. Measure the brake drum and seal as shown in **Figure 8**.
 - b. Calculate the clearance A and B between the brake drum and the seal. $A = C - D$ and $B = E - F$.
 - c. When the new waterproof seal is installed correctly, dimension A will equal B.
5. Apply clean water to all surfaces of the new waterproof seal (**Figure 9**) and to the surface plate.

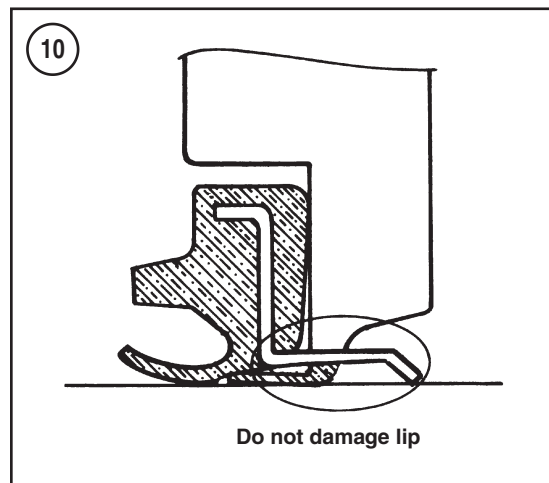
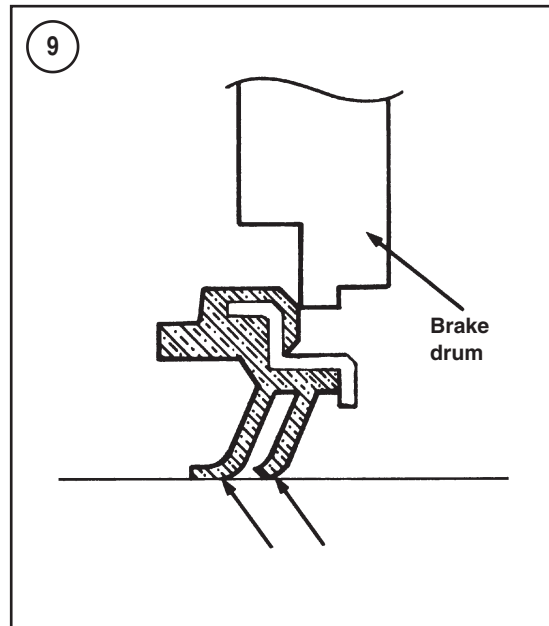
CAUTION

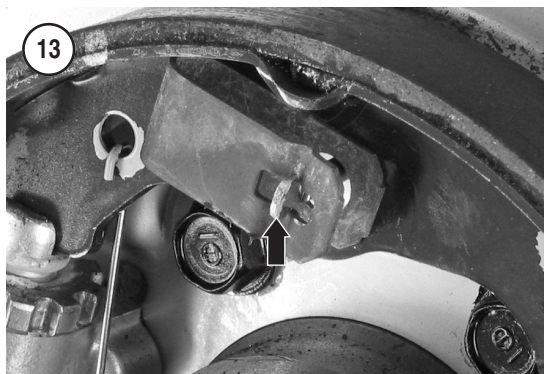
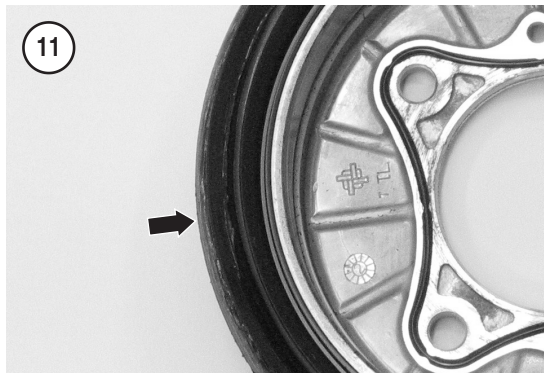
The brake drum must be backed up with a round steel plate to prevent it from being warped or damaged. Place a steel plate about 140 mm (5.5 in.) in diameter and more than 10 mm (0.4 in.) thick on the brake drum during Step 6.

CAUTION

Do not exert too much pressure on the seal during installation or the seal lip may be damaged as shown in **Figure 10**.

6. Place the new seal on a clean surface plate, then slowly and squarely press the brake drum (and steel backup plate) onto the new seal. Continue to press on the brake drum and frequently check the clearance between the seal and the drum. Refer to the dimensions calculated in Step 4. This dimension must be the same all around the perimeter of the brake drum. If the clearance is not equal, the seal will either not seal properly or wear prematurely.
7. After the seal has been installed correctly with uniform clearance all around the perimeter, wipe all water from the seal with a lint-free cloth.





WARNING

Do not get grease on the inner surface of the brake drum where the brake shoe linings make contact, as this will contaminate the lining surfaces and reduce braking performance. If grease does get onto the brake drum, thoroughly clean off all grease residue with lacquer thinner.

8. Uniformly pack the sealing lip cavity (**Figure 11**) with multipurpose grease (NLGI No. 3) as shown in **Figure 4**. Apply 14-16 grams (0.5-0.6 oz.) of grease.
9. Install the brake drum as described in this chapter.

FRONT BRAKE SHOE REPLACEMENT

There is no recommended mileage interval for changing the front brake shoes. Lining wear depends on riding habits and conditions.

Refer to **Figure 1**.

NOTE

Service one set of brake shoes at a time. Leave the other set intact so it may be used as a reference for the proper location of the brake components.

NOTE

The following illustrations depict a four-wheel drive model. Two-wheel drive models are similar.

1. Remove the brake drum as described in this chapter.
2. Measure the brake shoe lining thickness with a vernier caliper (**Figure 12**) and compare the measurement to the specifications in **Table 1**. Replace the brake shoes if they are out of specification.

NOTE

If brake shoe replacement is necessary, continue with Step 3.

3. On four-wheel drives, remove the wheel hub as described in Chapter Ten.
4. Rotate the brake pins 90° (**Figure 13**) and remove the brake pin holders (**Figure 14**).

NOTE

If the brake shoes are going to be re-used, mark them so they can be re-installed in their original position.

Copyright of Honda TRX350 RANCHER, 2000-2006 is the property of Penton Media, Inc. ("Clymer") and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.